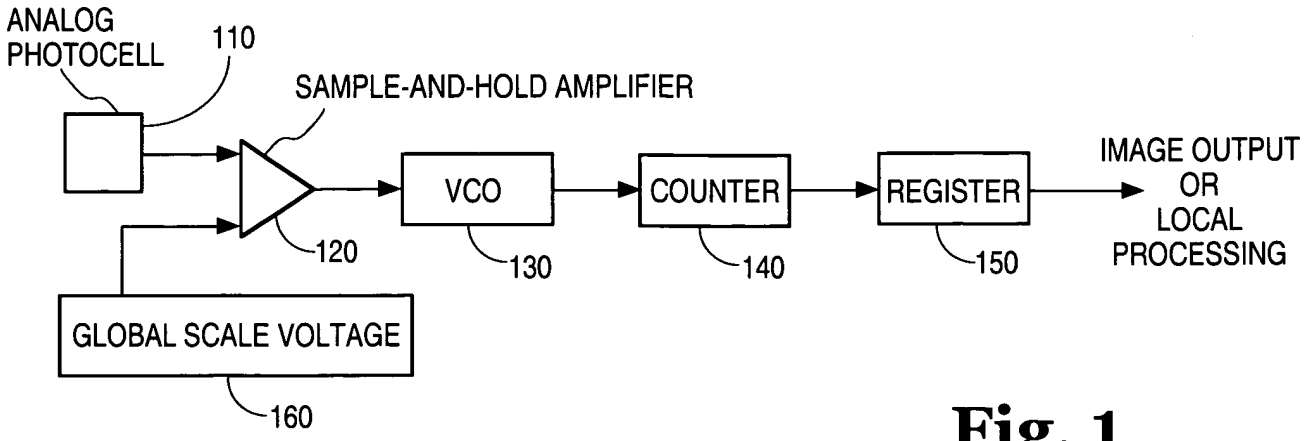
ANALOG PHOTOCELL
110
SAMPLE-AND-HOLD AMPLIFIER
VCO
COUNTER
REGISTER
IMAGE OUTPUT OR LOCAL PROCESSING
120
130
140
150
GLOBAL SCALE VOLTAGE
160

Fig. 1

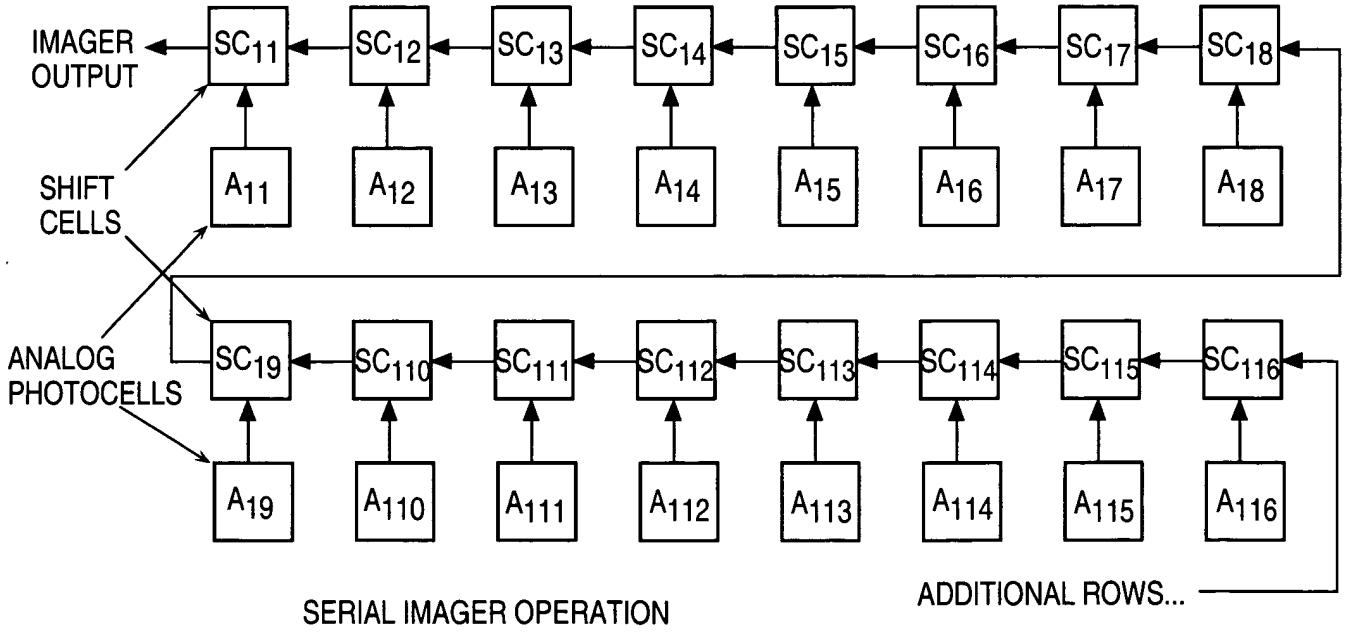
IMAGER OUTPUT
SC11
SC12
SC13
SC14
SC15
SC16
SC17
SC18
SHIFT CELLS
A11
A12
A13
A14
A15
A16
A17
A18
ANALOG PHOTOCELLS
SC19
SC110
SC111
SC112
SC113
SC114
SC115
SC116
A19
A110
A111
A112
A113
A114
A115
A116
ADDITIONAL ROWS...
SERIAL IMAGER OPERATION

Fig 2

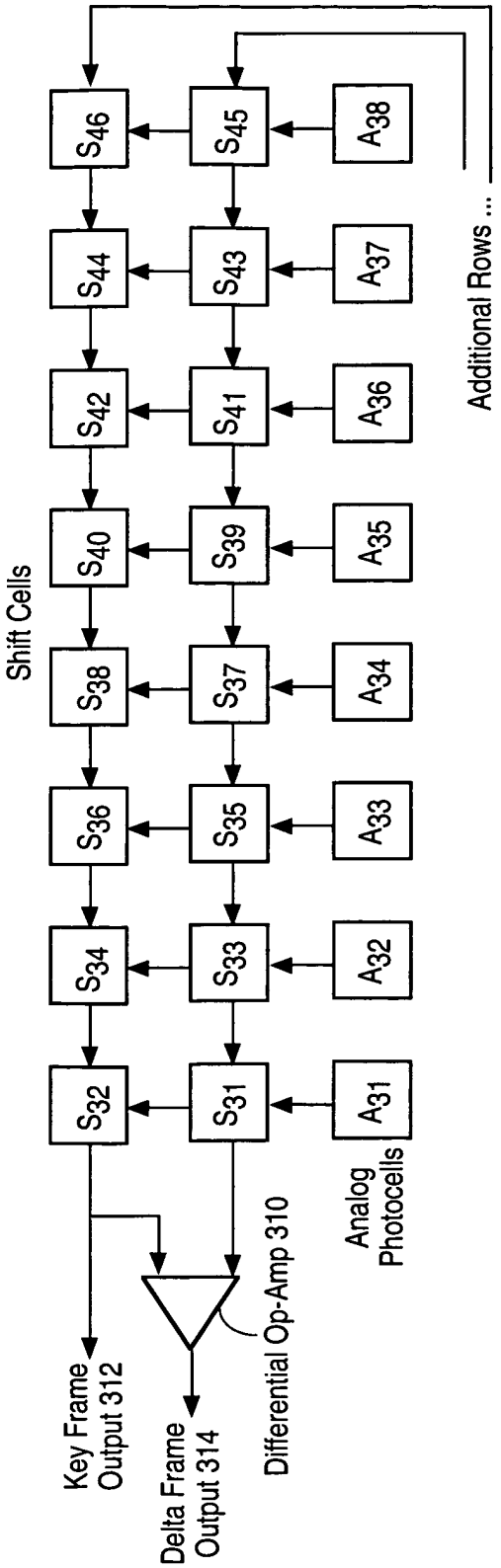
Shift Cells
S46
S45
A38
S44
S43
A37
S42
S41
A36
S40
S39
A35
S38
S37
A34
S36
S35
A33
S34
S33
A32
S32
S31
A31
Additional Rows ...
Analog Photocells
Differential Op-Amp 310
Key Frame Output 312
Delta Frame Output 314

Fig. 3

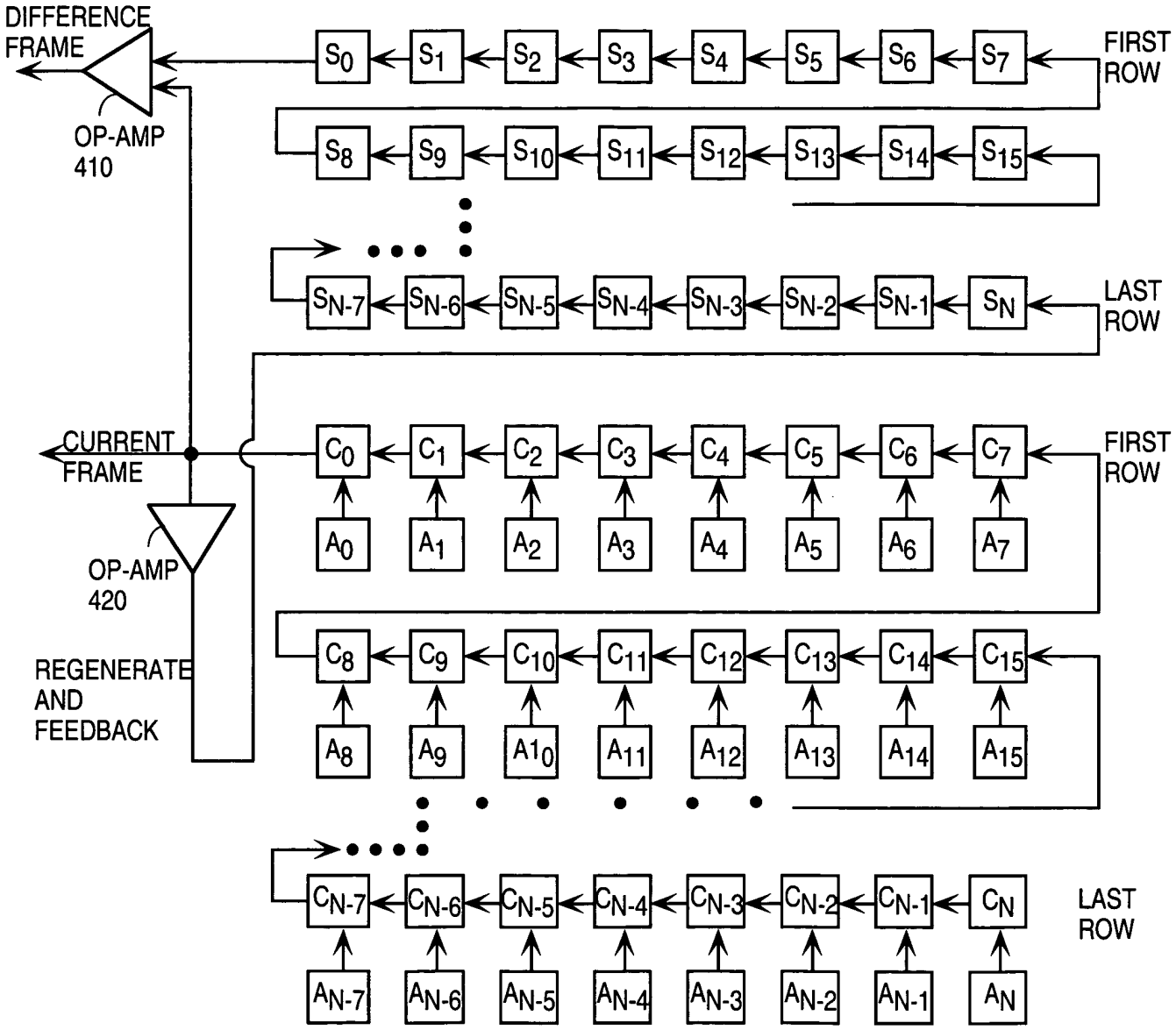
DIFFERENCE FRAME
OP-AMP 410
FIRST ROW
LAST ROW
CURRENT FRAME
OP-AMP 420
REGENERATE AND FEEDBACK
FIRST ROW
LAST ROW

Fig. 4

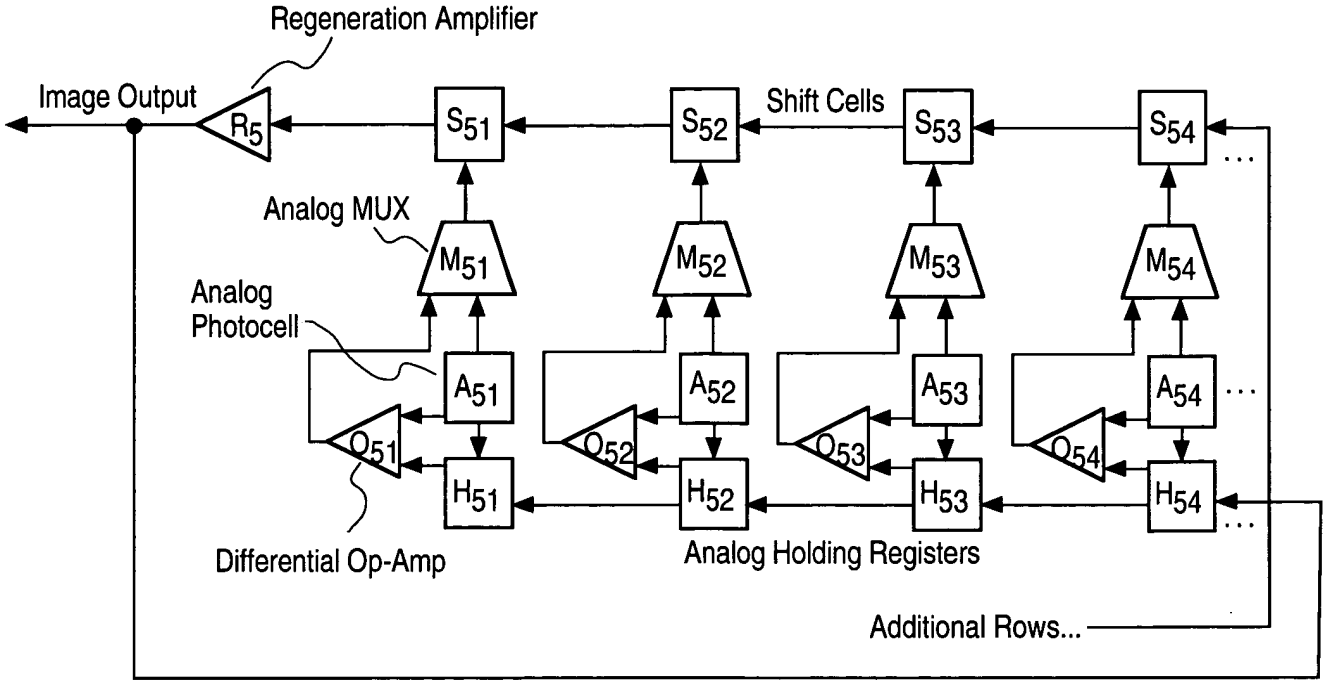
Regeneration Amplifier
Image Output
R5
S51
S52
Shift Cells
S53
S54
Analog MUX
M51
M52
M53
M54
Analog Photocell
A51
A52
A53
A54
O51
O52
O53
O54
H51
H52
H53
H54
Differential Op-Amp
Analog Holding Registers
Additional Rows...

Fig. 5

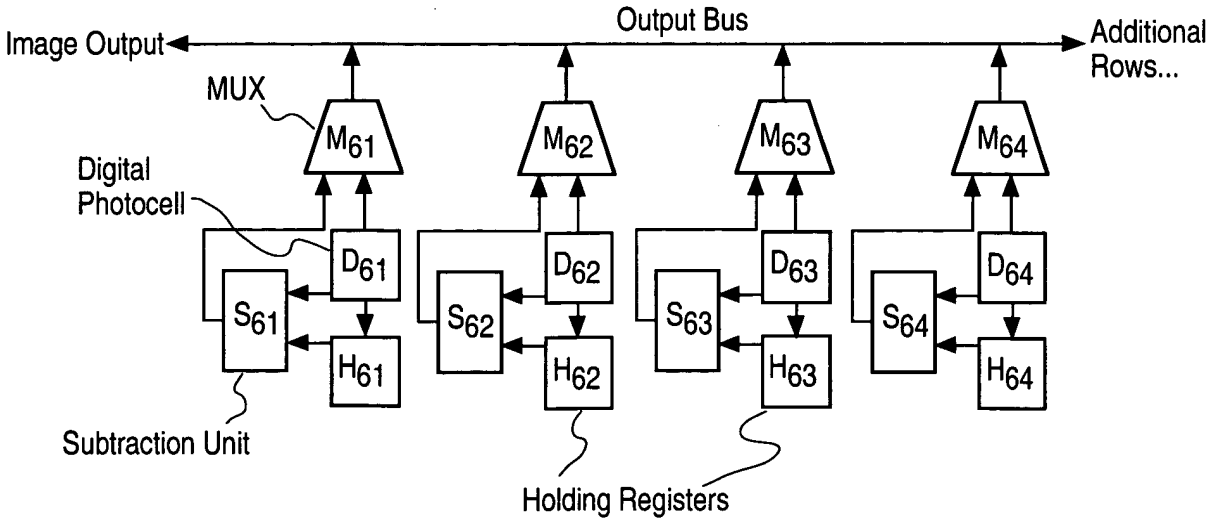
Output Bus
Image Output
Additional Rows...
MUX
M61
M62
M63
M64
Digital Photocell
D61
D62
D63
D64
S61
S62
S63
S64
H61
H62
H63
H64
Subtraction Unit
Holding Registers

Fig 6